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EXAMINER	
VOLPER, THOMAS E	
ART UNIT	PAPER NUMBER
2665	10

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/484,722	KOBAYASHI, SEIICHI	
	Examiner	Art Unit	
	Thomas Volper	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 January 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 2-9 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 2-9 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 31 January 2004 have been fully considered but they are not persuasive.

2. In response to Applicant's argument that "neither Takihiro or Suzuki, individually or in combination, disclose or suggest a method and means to provide for allowing communications between a plurality of network management processes... via one or more permanently-set, logically defined resource management paths" (page 3 of "Remarks"), the Examiner respectfully disagrees. Takihiro provides a means for communication between an ATM LAN and a legacy LAN, which may be an Ethernet (col. 1, line 29), via a switch fabric, which is controlled by a bridging/routing management function. These features of the ATM switch provide the overall structure of the transmission apparatus of the present invention, through which these two networks communicate. Suzuki shows that a network management system (NMS) may be connected to an Ethernet LAN, or connected in an ATM network (Figure 3). The apparatus of Takihiro connects to separate networks, a legacy LAN and an ATM LAN. It is obvious to combine the feature of the network management system of Suzuki with the legacy LAN and with the ATM LAN. The motivation for doing so is to provide each stand-alone network with a singular means of providing self-configuration management. The apparatus of Takihiro provides the means by which to connect two stand-alone networks, a legacy LAN and an ATM LAN. The Examiner's position is that the bridging/routing management function of Takihiro would need information about the network configurations of each of the legacy LAN and ATM LAN in order

to route traffic therebetween, information which would be easily provided by respective network management systems. As stated in the previous Office action, it is also obvious that the method of communication among the network management systems and the management function in the apparatus could be a PVC, a connection type supplied by Suzuki.

Applicant's arguments fail to overcome the 35 U.S.C. 103(a) rejection of claim 9, with claims 2-8 depending therefrom, thus this action is deemed final.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 9 and 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takihiro et al. (US 5,777,994) in view of Suzuki (US 5,796,736).

Regarding claim 9, Takihiro discloses a transmission apparatus comprising a switch, a LAN interface, an ATM interface and a management and control block interface (see Figure 1). Figure 1 also shows a segmentation and reassembly function (161) that meets the limitations of the second cell assembly and disassembly unit accommodated inside the apparatus. An ATM LAN (2) and Legacy LAN (3) may communicate with each other under control of the bridging/routing management function (115) in the management and control block (11) and by using virtual channels through switch fabric (13) (col. 6, line 63 – col. 7, line 35). The virtual channels represent logically defined paths. Takihiro fails to expressly disclose a first or second

user network management system and a first cell assembly and disassembly unit accommodated outside of the apparatus. Takihiro fails to disclose that the management function is an agent process and also fails to disclose a path permanently set in the switch. Suzuki discloses that similar network management systems may be disposed in an ATM network (NMS-A) or in a LAN (NMS-B), more specifically an Ethernet (col. 6, lines 56-65). NMS-A is an ATM terminal (col. 6, lines 56-58), and it is well known in the art that any ATM terminal must have some type of cell assembly and disassembly device in order to communicate on an ATM network. This meets the limitation of a first cell assembly and disassembly unit external to the switch. Suzuki discloses that an SNMP agent is installed at an ATM switch (col. 7, lines 27-30). Suzuki also discloses that communication on the ATM network uses a PVC/SVC (col. 6, lines 45-54). As is well known in the art, PVC stands for permanent virtual channel, or circuit. This meets the limitation of setting a permanent path in a switch. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to include a network management system of Suzuki in both the ATM LAN (2) and Legacy LAN (3) of Takihiro. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use an SNMP agent to manage the switch in the invention of Takihiro. It also would have been obvious to communicate through the switch fabric (13) of Takihiro using a permanent virtual circuit. One of ordinary skill in the art would have been motivated to do this because the network management systems would be able to provide the bridging/routing management function (115) with information about the respective networks that would be necessary for switching connections therebetween. One of ordinary skill in the art would have been motivated to use an SNMP agent to manage the switch because SNMP is a widely used standard protocol. One of

ordinary skill in the art would have been motivated to use a permanent path through the switch to guarantee bandwidth for management information.

Regarding claims 2-4, the teaching provided by Takihiro et al. in view of Suzuki with respect to claim 9 above meets the limitations of a resource management information path for resource management of cell assembly and disassembly units both internal and external to the transmission apparatus.

Regarding claims 5 and 6, Takihiro fails to disclose a controller that uses a format understandable by the agent, whereby the controller and agent communicate via an external interface. Suzuki discloses an embodiment wherein a SNMP agent may simultaneously manage a plurality of ATM switches (col. 13, lines 56-61). A controller, or proxy agent may be installed at those switches that do not have an SNMP agent. A controller and SNMP agent communicate via an independent interface (col. 13, line 62 – col. 14, line 18). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to include the controller in the apparatus provided by the teaching of Takihiro et al. in view of Suzuki provided with respect to claim 9. It would have been obvious to have more than one switch composing the apparatus as well. One of ordinary skill in the art would have been motivated to use the controller as an economic alternative to having every switch in the ATM network outfitted with an SNMP agent. One would have been motivated to include more than one switch in the apparatus because most ATM networks are large enough to require more than one switch.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takihiro et al. (US 5,777,994) in view of Suzuki (US 5,796,736), as applied to claims 9 and 2-6 above, and further in view of Song (US 6,289,018).

Regarding claim 7, Takihiro et al. in view of Suzuki fails to expressly disclose a resource management of a facility node in an STM transmission. Song discloses a multimedia handling node that uses the same hardware and software platform to accommodate both a STM node and an ATM node (col. 4, lines 6-25). An STM module interworks with an ATM module by way of a CLAD (see Fig. 2). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the transmission apparatus provided by Takihiro et al. in view of Suzuki to manage the combined ATM and STM node of Song. One of ordinary skill in the art would have been motivated to do this in order to allow diverse types of communications on the network.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takihiro et al. (US 5,777,994) in view of Suzuki (US 5,796,736), as applied to claims 9 and 2-6 above, and further in view of Song (US 6,289,018) and Biegel et al. (US 5,608,720).

Regarding claim 8, Takihiro et al. in view of Suzuki fails to expressly disclose a transaction language (TL1), which performs a facility node resource management in an STM transmission and a CMISE. Song discloses a STM node to allow STM transmission as aforementioned with respect to claim 7. Biegel discloses a network element that supports both TL1 and CMISE interfaces to communicate messages to agents and subagents (col. 1, lines 21-31). At the time the invention was made, one of ordinary skill in the art would have been

motivated to include both a TL1 and CMISE interface in the transmission apparatus provided by Takihiro et al. in view of Suzuki. One of ordinary skill in the art would have been motivated to do this in order to support communication in both non-OSI and OSI architectures.

Conclusion

7. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication, or earlier communications from the examiner should be directed to Thomas Volper whose telephone number is 703-305-8405 and fax number is 703-746-9467. The examiner can normally be reached between 8:30am and 6:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached at 703-308-6602. Any inquiry of a general nature or relating

to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

Thomas E. Volper

TEV

April 14, 2004

HUY D. VU
SUPERVISORY PATENT EXAMINER
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